

(Pisciotta et al., Supplementary material)

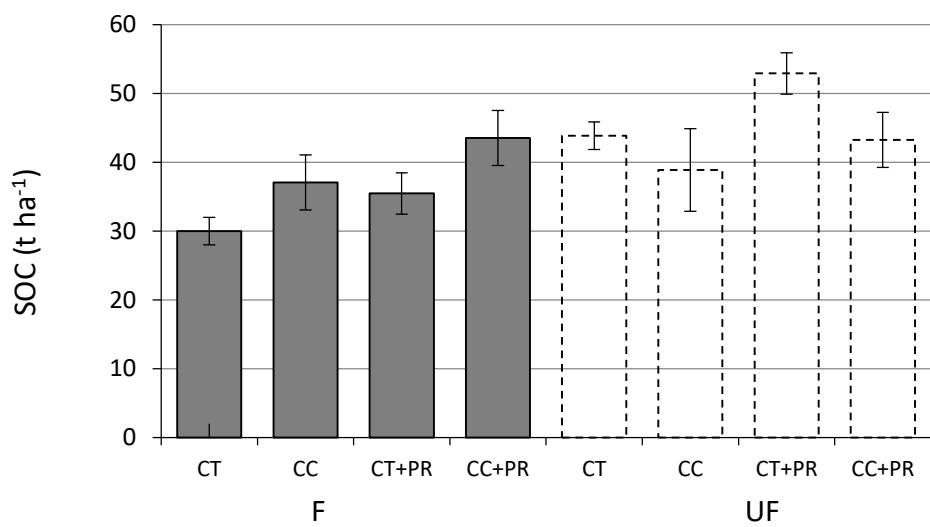
**Table S1.** Mean daily temperature (°C) and total monthly rainfall (mm) (2009-2011), at San Marco, Sicily, 37.325N, 13.002E

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean/sum
<b>2009</b>													
Temperature	12.2	10.6	13.2	15.5	20.6	24.2	27.6	28.1	24.4	19.7	16.5	14.7	18.9
Rainfall	173.7	87.1	40.6	53.3	5.4	1.4	0.0	3.9	76.9	116.2	33.5	65.2	657.2
<b>2010</b>													
Temperature	12.3	13.1	14.0	16.6	19.5	23.5	27.5	27.4	23.8	20.2	17.1	13.5	19.0
Rainfall	74.4	52.7	55.1	19.9	17.2	2.4	0.0	0.7	62.8	136.0	41.8	33.7	496.7
<b>2011</b>													
Temperature	12.0	11.1	12.8	16.6	19.2	23.6	27.0	26.9	25.5	19.9	17.0	13.5	18.8
Rainfall	82.2	68.7	48.6	43.5	22.2	2.3	0.0	0.1	18.1	88.9	54.8	63.3	492.7

**Table S2.** Values of Nitrogen inputs ( $\text{kg ha}^{-1}$ ) provided by cover crop (CC) biomass and vine Pruning Residue (PR) biomass  $\pm$  standard deviation

	CC		PR	
	Kg $\text{ha}^{-1}$	s.d.	Kg $\text{ha}^{-1}$	s.d.
<b>F</b>				
CT				
CC	84.9	1.8		
CT+PR			10.5	4.0
CC+PR	100.5	5.0	9.5	4.8
<b>UF</b>				
CT				
CC	42.7	4.7		
CT+PR			8.2	3.3
CC+PR	88.1	8.0	9.0	6.1

F= fertilization with Urea ( $200 \text{ kg ha}^{-1}$ ); UF= unfertilized. Soil Management: CT= Conventional Tillage; CC= Cover Crops; CT+PR= Conventional Tillage plus Pruning Residue; CC+PR= Cover Crops plus Pruning Residue.



**Figure S1.** SOC at the end of the trial (2011) measured at 0-40 cm depth. F= fertilization with Urea ( $200 \text{ kg ha}^{-1}$ ); UF= unfertilized. Soil Management: CT= Conventional Tillage; CC= Cover Crops; CT+PR= Conventional Tillage plus Pruning Residue; CC+PR= Cover Crops plus Pruning Residue. Vertical bars show  $\pm$  standard deviation values.